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To: The Rappaport Institute

Subj: SomerStat Implementation Internship

Summary

I worked for ten weeks in the summer of 2004 as an intern in the Office of the Mayor of Somerville. My project was to initiate SomerStat, a performance management system modeled after Baltimore's successful and much-heralded CitiStat program. At the end of the summer, pilot programs were up and running in two departments, and several successful "SomerStat Meetings" – the centerpiece and trademark of all performance management programs derived from the original CompStat NYPD model – had been conducted. Additionally, personnel had been hired to fill the positions of director and analyst within the new SomerStat Department. In the months that followed my internship, the SomerStat program has grown to incorporate several other departments, and the quality and depth of the data analysis has continued to increase. SomerStat is the first of its kind in the Commonwealth of Massachusetts, and is one of the first CitiStat-style programs to be launched nationwide in a city of Somerville's size.

Adapting the CitiStat Model at a Smaller Scale

With a population of not quite 80,000, Somerville is one of the smallest cities to attempt to implement a CitiStat-style performance management system. The city's size is both a challenge and an opportunity: a challenge because the city does not have a lot of resources to throw at the problem, but an opportunity because change can be implemented relatively quickly when working at a smaller scale. By tapping the resources of the Kennedy School and the Rappaport Institute, Mayor Curtatone was able to significantly leverage the city's resources. And by demonstrating his support for the program early and often, the mayor ensured that the most significant factor for SomerStat's success was in place: sincere commitment and dedication from the city's top leadership.

The Scope of the Internship

As my internship began, I saw two major components to the task of launching SomerStat. The first was to initiate a successful pilot program, in order to develop SomerStat's structure, procedures, and norms. More importantly, a viable pilot program would give the program momentum and credibility. A dangerous pitfall when establishing any ambitious reform program is getting trapped in the planning phase and never actually implementing anything. My plan to avoid this trap was to just jump in and start

making things happen. I only had ten weeks, and I wanted to create momentum for SomerStat through some early, visible wins.

The second component of the plan was to create the infrastructure necessary for the program to keep going beyond the summer. The critical aspect of this infrastructure would be the people who would staff the SomerStat Department. So the second part of my plan was to do everything I could to get capable people hired as quickly as possible.

Staffing SomerStat

The mayor's office had established the goal of hiring three new employees for the SomerStat Department: a full-time director, a full-time analyst, and a part-time IT technician. The SomerStat Department was included in the FY05 budget that the mayor submitted to the Board of Aldermen for approval. I helped Mayor Curtatone prepare for the SomerStat presentation to the Board, wrote background papers for the Aldermen, and fielded questions from the Aldermen when the mayor presented the SomerStat budget to the Board. The Board approved 100% of the requested funding for the new SomerStat Department (which comprised the personnel salaries and sundry administrative overhead), which was a strong vote of confidence in the program.

With funding in hand, the next step was to establish job requirements and post the jobs. Using documents from Baltimore's CitiStat as a reference, I drafted job requirements for the director, analyst, and technician positions, and pushed them through the Personnel Department to be posted. The jobs were advertised in both the venues usually used by City Hall – the local newspapers, job websites, and professional local government trade magazines – as well as in such tailored spots as the career services offices of local public administration graduate schools.

There were many responses for the director position. I screened resumes and cover letters and made recommendations to the mayor's deputy on which candidates to interview. The interview panel consisted of the mayor, his deputy, the city treasurer, the city auditor, the city solicitor, and me. We interviewed all of the serious candidates for director and quickly narrowed the field to the two top candidates. After some debate, the panel decided upon its preferred candidate for the job, a recent Harvard Business School graduate who was currently working as an analyst for the Boston Police Department. She was offered the job, and accepted.

Filling the analyst and technician positions proved a harder task. The resumes we received in response to these job postings were less than unimpressive, which was no doubt due in part to the relatively low salaries attached to the positions. The decision was made to re-post the analyst job with local undergraduate career services offices, since the offered salary was more appropriate to a college graduate right out of school who was looking for an entry level position in local government management. Before the job was re-posted, however, another option was discussed: eliminating the technician position and augmenting the analyst's salary with some of the funds originally intended for the

technician. Since the IT Department was committed to supporting SomerStat with the technicians it had, and a first-rate analyst was critical to the success of the program, the mayor's deputy and I recommended that this second option be pursued. The mayor agreed that this was the best way to go, the Board of Aldermen approved the changes to the budget, and the analyst position at the new, higher salary was offered to the runner-up candidate for the director's position. A recent Kennedy School graduate with strong analytical skills, he accepted the offer. The SomerStat Department was now manned at 100% with two extremely talented individuals.

The Pilot Programs

The mayor was adamant that the Department of Public Works (DPW) be the first city department to go under the SomerStat knife. DPW touched the lives of everyone in the city in hands-on, easy to understand ways – by filling potholes, removing trash, fixing roads, etc. – so improvements in DPW service initiated by SomerStat would be visible and understandable to the general public. Additionally, DPW had a reputation within City Hall as being a difficult department to manage efficiently. If SomerStat could be successfully launched here, it would demonstrate to every department head, alderman, and rank-and-file city employee that the mayor was serious about the program, and that the program was for real.

DPW proved to be a difficult department in which to launch a pilot SomerStat program, but the conditions that created this difficulty also ensured that even the smallest successes would have a major impact in increasing the department's efficiency and effectiveness. As it currently operated, the department was managed passionately but chaotically. There were no established processes for getting work done. There was no system to track the progress of jobs. Citizen complaints and requests were logged, but infrequently followed-up on. Management's priorities shifted as crises erupted, or as the mayor came up with a new idea, or as aldermen called with constituent complaints. In the absence of formal systems and processes, the department was held together by the strength of the personalities of the division heads and supervisors. (The management climate in DPW reminded me a lot of my first tour of duty in the Navy, in the engineering department of an aging destroyer which operated in a similar fashion. So, I felt right at home, albeit in a pretty dysfunctional home!)

The biggest impediment to establishing SomerStat in DPW was the complete lack of available operational information. A CitiStat-style performance management system needs data, and lots of it, in order to function. Going in to the project, I had anticipated computerizing a paper-bound system in order to collect relevant data; the ugly reality was that there wasn't even paper to work with.

After sizing up the department, I envisioned the pilot program in DPW as a two-track plan. The first track would be to establish the procedures and infrastructure needed to collect operational data (how many work hours it took to fill a pothole, etc.), and the second track would be to do the same for administrative data (overtime, sick time, etc.). I

knew that the operational track would be a long-term undertaking, but the administrative track could potentially be launched and bear fruit before my summer internship was complete. I set to work on both tracks.

To gather the necessary operational data, the department needed a computerized work order system. Such a program would allow supervisors to prioritize and plan their work, track the progress of jobs, and monitor the personnel hours, equipment and supplies used in each job. Customer service agents could enter citizen requests and complaints directly into the system, and high-priority items coming from the mayor's office or the Board of Aldermen could be tracked as such. The SomerStat Department would be able to tap into the system to analyze the department's operational data.

There was much debate about whether to develop this software system in-house using the city's IT Department or to use a commercial product (either off-the-shelf or custom tailored). (See below for further discussion of this issue.) Regardless of where the system came from, I knew that its implementation would require a great deal of knowledge about how the department conducted its business. To gather the necessary background information, I began a series of interviews with each division head and foreman. Using the "activity maps" that had been recently developed by a consultant as part of the city's ongoing effort to convert to an activity-based budget, we worked our way through each of the 116 separate activities that the department was responsible for. Eventually, this information would be used to tailor the work order software to the department's activities.

I concurrently worked on gathering the department's administrative data. The data that I needed was available in city hall's UNIX-based payroll database. The IT Department created a portal that would allow me to access the database, and I was able to download weekly payroll data into Excel. To create a baseline for analysis, I downloaded all of DPW's weekly data for FY02, FY03, and FY04. This proved to be a time-consuming process, as each of the department's ten divisions had to be downloaded individually and then compiled. (Once I had the technique down, it took about 20 minutes to download a week's worth data for the department. This added up to over 52 hours to compile all of FY02, FY03, and FY04 for DPW.)

With past years' data for overtime, sick time, vacation time, and double-time in hand, I was able to do some baseline analysis. Interesting patterns became clear, including how departmental sick time was highest not during the winter flu season but in the summer months; how school custodians' overtime spiked in the weeks preceding the start of school; and how overtime throughout the department had dramatically increased since the current mayor took office.

While the operational data would be a long time coming, I was confident that the administrative data we now had would allow us to conduct productive official SomerStat meetings, which are the centerpiece and trademark of the CompStat-style program. We modeled the SomerStat meeting after the CitiStat model, with the mayor presiding over the action with his key advisors (deputy, treasurer, and solicitor) at his side, and the DPW

superintendent and division heads in attendance. In this initial meeting, I presented graphs of the past years' administrative data, along with current FY05 data. As we had hoped, this led to a lively series of discussions about how DPW managed overtime. In the weeks that followed, more SomerStat meetings dug further into the overtime issue in order to stem the alarmingly increasing trend. Additionally, each division head presented his or her division's key problems and concerns to the group. This proved to be very valuable, as it gave the mayor and his leadership team an in-depth look at how DPW operated.

With the DPW SomerStat program in motion, I decided to launch a second pilot program in a department that had a lot of operational data available – the Department of Traffic and Parking (T&P). Like many cities, Somerville contracted out the processing of its traffic and parking tickets to a third-party vendor. The vendor's regular reports – weekly, monthly, quarterly, and annual – provided a tremendous amount of data about the tickets that T&P issued. Working with the T&P leadership team, I was able to mine these reports for the best metrics to monitor the department's performance. Like I had done with DPW, I also compiled a baseline for T&P's administrative data by downloading and compiling information from past years' payroll databases. With significant operational and administrative data in hand, we then held the first SomerStat meeting for T&P. This meeting was a striking success. It demonstrated SomerStat's powerful ability to dig deep into a department's operations and provide the mayor with detailed analysis and recommendations.

The IT Question

Throughout the summer, one difficult issue remained unresolved. This was the question of how the computerized work order software for DPW should be developed. Two options each offered their own advantages and drawbacks. The first option was to develop the software in-house, using the IT Department's work force. This would allow us to control the design process completely and tailor the system to our needs. However, it would be extremely time consuming, and while IT had the know-how and technical ability to get the job done, they were already spread very thin throughout City Hall. It was not certain when they could complete the massive project. At first glance, the in-house plan appeared to be the most cost-effective of the options, but when the opportunity costs of the IT technicians' time was taken into account, the issue became much cloudier.

The second option involved using a commercially-designed software package. This plan would entail contracting the job out to a vendor such as Motorola, which had created similar systems for such cities as Baltimore and Chicago. This option would give us a state-of-the-art product that would be powerful, user-friendly, and full of bells and whistles. Additionally, the Motorola product could one day be expanded throughout City Hall in order to create a comprehensive "311" style call center. However, the costs of such a product were significant and prohibitive. Functionally, the Motorola package did not differ significantly from the planned in-house product (which reassured the IT

technicians and me that we had been barking up the right tree in dreaming up our software). However, the Motorola program, as demonstrated by various sales reps, was much “sexier” than the rather clunky, DOS-based in-house demo.

As the summer progressed, the question remained unresolved. However, the IT Department and I pressed ahead on developing the in-house system, under the theory that the groundwork that we were laying by gathering background data on the department’s work processes could be applied even if an outside product was eventually purchased. Ultimately (well after my internship had concluded) the mayor decided on a third option: utilizing an open-code system developed by a local software engineer. The system will be flexibly enough to be tailored to the city’s needs, powerful enough to get the job done, and much more affordable than the top-tier commercial alternative.

The Road Ahead

In the months since my internship concluded, the SomerStat Department has increased the program’s scope to cover many other departments. The development and implementation of the work order software for DPW and other departments is well underway. The amount of data analyzed continues to increase, as does the quality and sophistication of the analysis process. The procedures and standards for SomerStat meetings – the centerpiece of the program – are continually refined and improved. It will be some time before SomerStat’s impact can be definitively assessed, but the program, in the extremely capable hands of its director and analyst, shows all signs of being a tremendous success. I have no doubt that SomerStat will be a model of effective and efficient city government in the Commonwealth for years to come, and I am proud to have played a role in its creation.